

# NEWS TODAY

## Several people died in massive landslides in Wayanad, Kerala

Extremely heavy rain triggered a series of landslides in Wayanad district which lies in the **Western Ghats**.

- Western Ghats is the 2<sup>nd</sup> **most vulnerable region to landslides** in India after **Himalayas**.
  - ⊖ Western Ghats triggers frequent landslides in Monsoon due to the **high soil depth** and **steep slope**.
  - ⊖ High soil depth allows more **water retention** and an **increased porewater pressure** ultimately leading to landslides.

### About Landslides

- **Definition:** Landslides occur when gravity forces pushing on hill slope material exceed the frictional forces holding the material in place, causing slope failure.
  - ⊖ Approximately 0.42 million sq. km (12.6% of land area), excluding snow covered area, is prone to landslide hazard in India. (**Geological Survey of India(GSI)**)
- **Causes:**
  - ⊖ **Natural:** Undercutting of slopes due to flooding or excavation, earthquakes, snowmelt etc.
  - ⊖ **Anthropogenic:** Overgrazing by cattle, soil erosion due to deforestation, terrain cutting and filling, etc.
- **Effect:** Floods due to diversion of river courses or channel blockages, Disruption of traffic, etc.
- **Challenges in Monitoring/Prevention:** Unlike other disasters that are largely controlled by **macro or regional factors**, landslides are largely controlled by **highly localized factors**.
  - ⊖ Hence, gathering information and monitoring the possibilities of landslide is not only difficult but also immensely cost-intensive.

### Key Initiatives

- **National Landslide Risk Management Strategy** (2019) by National Disaster Management Authority (NDMA)
- **National Landslide Susceptibility Mapping (NLSM) Programme**, under it GSI has completed landslide susceptibility mapping.
- IIT Delhi created the **first hi-resolution Indian Landslide Susceptibility Map (ILSM)**.
- Recently, **National Landslide Forecasting Centre (NLFC)** has been launched in Kolkata. It will operationalize the regional **Landslide Early Warning System (LEWS)** nationwide by 2030.

## FAO Releases Integrated Fire Management (IFM) Voluntary Guidelines Updates

After 2 decades, FAO updated its IFM voluntary **guidelines for managing wildfire risks**.

- The new guidelines are prepared by **Global Fire Management Hub (GFMH)** which was launched by **FAO and UNEP in 2023**.

### Key Principles of IFM

- **Economic:** Maximize benefits and minimize wildfire losses by implementing an efficient IFM program.
- **Environmental:** Consider interactions between climate change, vegetation, and fire regimes in fire planning and management.
- **Equity:** Consider the impacts of fire from all stakeholder perspectives, including gender, as wildfires can affect them differently.
- **Human health:** Use early detection and warning systems to reduce health impacts and adapt fire danger ratings with reliable weather forecasts.

### Key Strategic Action of IFM

- **Integrated Fire Management:** Take action before, during, and after a fire while avoiding the introduction of invasive species through fire suppression and equipment.
- **Planned fire:** It is a component of wildfire prevention and involves allowing some fires to burn within defined parameters in fire-dependent ecosystems.
- **Fire Awareness Programmes:** Develop programs that respect cultural and social norms, including the use of fire for agriculture, forestry, and traditional purposes.
- **Knowledge transfer:** Collaborate with scientists, Indigenous Peoples, and local experts to enhance policies, regulations, and practices.

### About wildfires

- **Annual Burn Area:** Around 340 to 370 million hectares of Earth's surface are burned by wildfires each year.
- **Projected Frequency:** Extreme wildfires are expected to increase by about 50% by the end of the century.
- **Impact of Climate:** Climate change will lead to hotter, drier, and longer fire seasons due to increased drought, high temperatures, and strong winds.
- **Consequences of wildfires:** Extreme wildfires can harm sustainable development, threaten livelihoods, and produce significant greenhouse gas emissions.

## China completes 400-meter bridge near Pangong Lake: Report

The bridge, located in **territory illegally held by China since last 60 years**, is near the **Line of Actual Control (LAC)** in Ladakh.

- It enables **rapid movement of Chinese troops** between the **North and South banks of Pangong Lake**.
- India is also constructing the **4.1-kilometer Shinkun La tunnel** to provide **all-weather connectivity between Himachal Pradesh and Ladakh**.

### Border dispute between India and China

- The border between India and China is **not formally demarcated**.
- **India** considers the **LAC to be 3,488 km** long, while **China** considers it to be only **around 2,000 km**.
- **LAC is divided into three sectors**
  - ⊖ **Western Sector (Ladakh):** **India** considers the **Johnson Line** (of 1865) as the border whereas **China** claims the **McDonald Line** (of 1899) as the true border.
  - ⊖ **Middle sector** (Himachal Pradesh and Uttarakhand): Largely **undisputed**.
  - ⊖ **Eastern Sector** (Arunachal Pradesh and Sikkim): **China** claims entire **AP** as part of the **Tibetan Autonomous Region**.
    - ◆ The alignment of LAC is **along the MacMahon Line**, drawn during the **1914 Simla Convention**, which **China** has **rejected**.



## RBI issues direction on Treatment of Wilful Defaulters (WD) and Large Defaulters

The directions have been issued under **Reserve Bank of India Act, 1934**, **Banking Regulation Act, 1949** and **Credit Information Companies (Regulation) Act, 2005**.

- The objective of direction is to provide for a **non-discriminatory and transparent procedure** for classifying a borrower as a wilful defaulter by the lenders.
  - ⊖ As of March 2023, 16,883 accounts involving total borrowing of Rs 3.5 lakh crore had been classified as wilful defaulters.

### Key Provision of the Direction

- **Wilful Defaulter:** wilful default with outstanding amount of ₹25 lakh and above
  - ⊖ **Wilful default occurs when** borrower defaults in meeting payment/ repayment obligations to the lender and any one or more features are noticed
    - ◆ borrower has the capacity to pay
    - ◆ diversion of funds and siphoned off the funds,
    - ◆ disposal of immovable or movable assets provided for securing credit or
    - ◆ failure to infuse equity despite having the ability to do so.
- **Large defaulter:** default with an **outstanding amount of ₹1 crore and above**, and where suit has been filed or whose account has been classified as doubtful or loss.
- **Identification:** Lenders have to establish **Identification Committee** to examine the evidence of wilful default.

### Measures to be Taken

- Initiation of Criminal proceedings by the lenders
- **Penal:**
  - ⊖ No additional credit facility by any lender to WD or associated entities
  - ⊖ No credit facility by any lender for new ventures
  - ⊖ Not eligible for restructuring of credit facility
- **Preventive Measures:** Proper credit appraisal, monitoring end use of funds



## Atomic Energy Regulatory Board (AERB) Grants Permission for First Approach to Criticality of 500 MWe PFBR

The 500 MWe sodium-cooled Prototype Fast Breeder Reactor (PFBR) is located at Kalpakkam, Tamil Nadu.

- It is India's first **indigenous** PFBR.
- It is commissioned by **Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI)**, a Government Company under administrative control of the **Department of Atomic Energy (DAE)**.

### About First approach to Criticality

- **Criticality** refers to the **initial process of bringing** a reactor to a self-sustaining chain reaction for the first time.
- The completion of **core loading** will effectively mark the **first approach to 'criticality'**.
  - ⊕ **Core loading** is the process of **placing nuclear fuel assemblies inside the core** of a nuclear reactor.

### What is a Fast Breeder Reactor?

- FBR is a nuclear reactor that uses fast neutrons to **generate more nuclear fuel than they consume** while generating power.
  - ⊕ FBR will use **Uranium-Plutonium Mixed Oxide (MOX)** fuel.
- The **Uranium-238 "blanket"** surrounding the fuel core will undergo nuclear transmutation (conversion of one element to another) to **produce more fuel**, which is why they are termed **"breeders."**
- **Significance**
  - ⊕ The **operationalisation of PFBR** will mark the start of stage II of India's **three-stage nuclear power programme**.
  - ⊕ By **transmutation**, Thorium will create fissile U-233 which will be used as fuel in the **third stage**.

### Atomic Energy Regulatory Board (AERB)

- **Established:** by President in 1983 as per the provision of the Atomic Energy Act, 1962.
  - ⊕ Regulatory authority of AERB is derived from rules & notifications promulgated under Atomic Energy Act and **Environment (Protection) Act, 1986**.
- **Mission:** to ensure use of ionizing radiation & nuclear energy in India does not cause undue risk to health of people and environment.

## SEBI Releases Consultation Paper on Measures to Strengthen Index Derivatives Framework

Consultation paper seeks to introduce **measures to enhance investor protection and promote market stability** in derivative markets while ensuring sustained capital formation.

### About Index derivatives

- Derivatives are **financial contracts that draw their value from an underlying asset** (commodity, security, currency, or index).
- **Futures and Options (F&O)** are common types of derivatives (refer to the box).

### Need for Strengthening Index Derivatives Framework

- **Excessive speculative trading:** ₹50,000–₹60,000 crore of household savings lost through derivatives trading.
- **Increased retail participation in equity derivatives:** Index options rose from 2% of individual trades in FY 2018 to 41% in FY 2024.

### Key Changes Proposed

- **Increase in Minimum Contract Value** from current current size is ₹5 lakh to ₹10 lakh to ₹15 lakh to ₹20 lakh which could increase to up to ₹30 lakh after six months.
- **Limiting Strike Prices** to 50 strikes for an index derivatives contract at launch to prevent scattering of trading activity and liquidity.
  - ⊕ The strike price is the **pre-determined price** at which the buyer and seller of an option **agree on a contract or exercise a valid and unexpired option**.
- Members to **collect option premiums upfront from clients**.

### About F&O

- **Futures Contract:** A contract wherein the **buyer has the right to buy or sell pre-defined quantities** of an instrument at a **specified price and time**.
  - ⊕ Examples are stock futures, index futures, currency and interest futures.
- **Options Contract:** It offers the **buyer the right, but not the obligation, to buy or sell** a security at an **agreed-upon price** during a certain period on a **specific date**.
  - ⊕ **Call Options and Put Options** are the major option contracts.

## Also in News



### Fully Accessible Route (FAR) Bonds

RBI **excluded all new government securities with 14-year and 30-year tenures from the FAR**.

- Previously, FAR allowed foreign investors unrestricted access to these bonds, but the new measure is **expected to redirect inflows towards shorter-term bonds instead**.

### About FAR

- RBI introduced FAR to **enable non-residents to invest in specified Government of India dated securities**.
- **Eligible investors are any "person resident outside India"** as defined in section 2(w) of the **Foreign Exchange Management Act, 1999 (FEMA)**.



### Dividend Equalisation Fund (DEF)

Reserve Bank of India (RBI) asked UCBs to stop the practice of setting up a DEF.

### About DEF

- DEF are **set up by UCBs** through appropriation of profits to **pay dividends in future years**, when profits are insufficient or where the bank has posted a net loss.
- However, current **rules distinctly prohibit making such payments from previously accumulated profits or reserves**.
- As a one-time measure, **RBI also permitted UCBs to transfer the money in the DEF to general reserves/free reserves** to provide better treatment of these balances for regulatory capital purposes.





### National Apprenticeship and Training Scheme (NATS)

Ministry for Education launched the National Apprenticeship and Training Scheme (NATS) 2.0 Portal.

- Portal will facilitate registration and application for apprenticeships.

#### About NATS

- One of the flagship programmes of Government of India launched under the provisions of **Apprentices Act, 1961** for **Skilling Indian Youth**.
- **Key Features**
  - ⊕ Offers **Graduate, Diploma students and Vocational certificate holders**; a practical, etc. for duration ranging from 6 months to 1 year.
  - ⊕ During period of apprenticeship, apprentices are paid a **stipend amount**, 50% of which is reimbursable to the employer from Government.
  - ⊕ At the end of the training, apprentices will receive **Certificate of Proficiency**.



### Sturgeon

World-Wide Fund for Nature report found four species of **sturgeon**, among the most endangered fish species globally.

- These include **Stellate sturgeon, Russian sturgeon & beluga** (Critically Endangered on IUCN list), and **sterlet** (Endangered on IUCN list)

#### About Sturgeon

- Sturgeons are large, freshwater, or anadromous **fishes of north temperate regions**.
- These fishes **evolved 250 million years ago in Jurassic period** and are considered genetically **"living fossils"**.
- Sturgeons are heavily exploited globally for **their roe/eggs (caviar) and meat**.
- Since 1998, **international trade in all species** of sturgeons has been **regulated under CITES**.

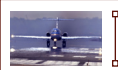


### Seine River

Men's triathlon in Paris Olympics 2024 postponed due to high levels of pollution in Seine river in Paris.

#### About Seine River

- **Second longest river of France**, after the Loire.
- Rises from Burgundy wine region of northeastern France.
- Flows north-westerly to the Normandy coast, where it empties into the English Channel.
- Drainage network of this river carries most of the **French inland waterway traffic**.



### Impact of Temperature on Flight Take off

Flights at the Airport in Ladakh were cancelled due to **high temperature**.

#### Impact of Temperature on Flight Take off

- Aircraft wings are **curved on top**, hence **air over the top of the wings moves faster** than the air beneath the wing.
- Faster-moving air then **creates a lower pressure above the wing** (as per Bernoulli's principle) as compared to the pressure under it.
- This **difference in the pressure generates lift force underneath the wings** that helps the aircraft take off.
- Higher temperatures **expand the air, making it less dense**.
- Thus, **fewer molecules** are available underneath the aircraft's wings **to create enough lift** to push the plane into the sky.



### World Heritage Committee(WHC)

46<sup>th</sup> Session of the **World Heritage Committee (WHC)** concluded successfully in New Delhi.

- WHC is responsible for the implementation of the **World Heritage Convention** of UNESCO.
- Also, it defines the use of the World Heritage Fund.
- It has the final say on whether a property is inscribed on the World Heritage List.

#### Major Outcomes/Developments of 46<sup>th</sup> WHC

- Addition of **Moidams** (from Assam) raises India's total number of World Heritage sites to 43.
- India pledged \$1 million to the **UNESCO World Heritage Centre**.
- **India and US** signed the first ever 'Cultural Property Agreement' to prevent and curb the illicit trafficking of antiquities from India to the USA.



### Keeladi

**Terracotta pipelines** unearthed at Keeladi in Sivaganga district.

- It proves the knowledge that prevailed in the **water management system** and could be said that **alignment was a key feature** in the water management system.

#### About Keeladi

- It is a **Sangam age (500 BCE to 300CE)** site located on the **river Vaigai** near temple city Madurai.
- The excavations prove that an **urban civilisation existed** in the Sangam age.

## Personality in News



### Saheed Udham Singh (1899 -1940)

Martyrdom Day (31st July) of Shaheed Udham Singh has been observed.

#### About Saheed Udham Singh

- He was born in Sangrur district (Punjab).
- He was deeply influenced by **Bhagat Singh**.
- He witnessed the Jallianwala Bagh Massacre (1919) and vowed to avenge the same.

#### Key Contributions/Work

- He formed **Azad Party** in Chicago as a part of **Ghadar Party**.
- On 13th March 1940, he shot **Michael O'Dwyer** who was the then **Lieutenant Governor of Punjab** when the Jallianwala Bagh massacre took place.

Values : **Courage, perseverance** etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI